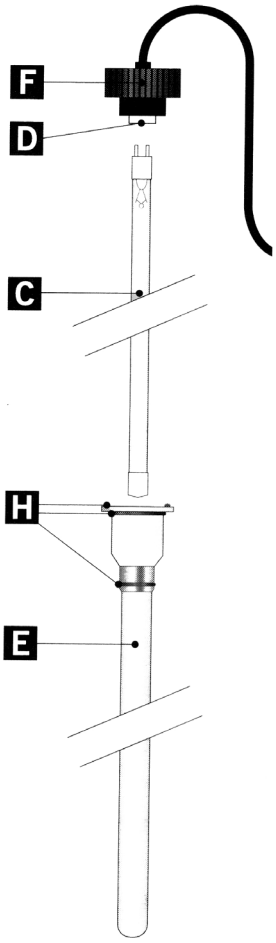
Operating Instructions

for the

UV Ionizer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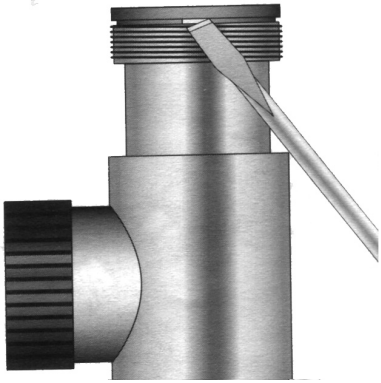
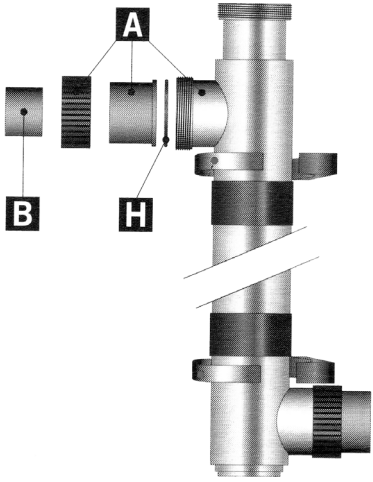
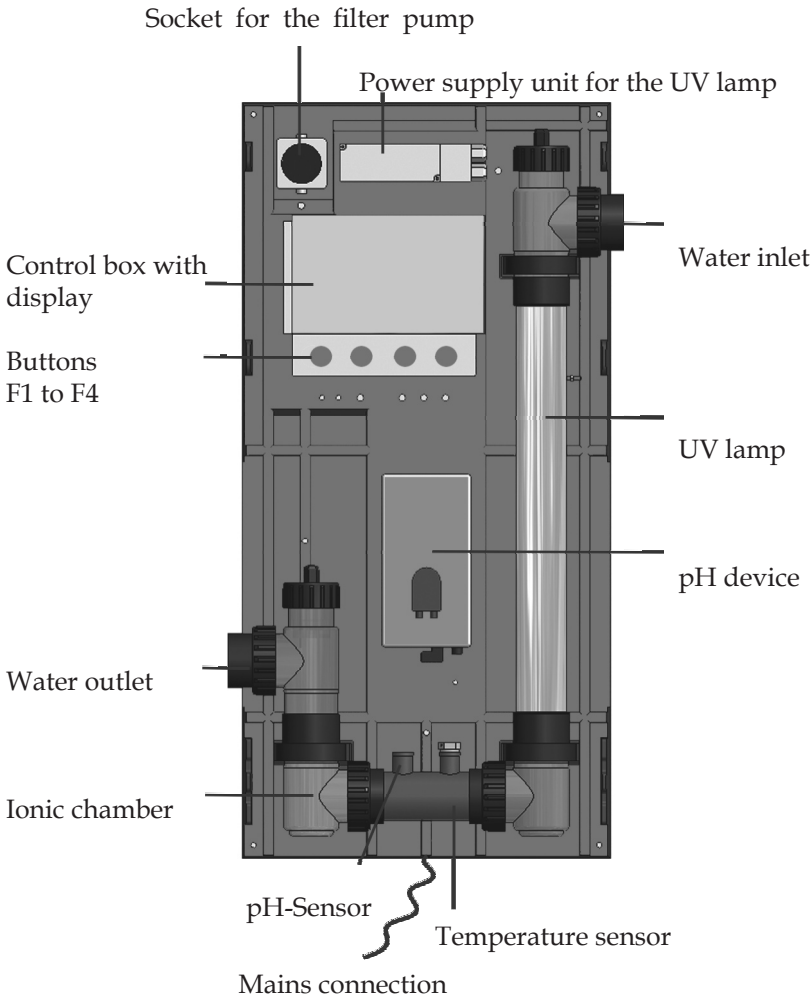



A
B
H

Dear Customers,

With the purchase of a UV Ionizer, you have decided to clean the water in the pool in a natural manner. A very good decision.
The UV Ionizer offers you simply and quickly the natural removal of bacteria and germs in your water basin through the radiation with light and the releasing of copper ions. There is no necessity whatsoever for the addition of chlorine and other health damaging chemicals. These instructions will make you familiar with the use of your new UV Ionizer and make the operating easier. Please read the user instructions vigilantly before you operate your new appliance for the first time. Follow the individual steps for the initial operation and to carry out all settings. Also, please obey the safety instructions implicitly, in order to prevent accidents and damage. Keep these instructions in a safe place and, if you pass on this appliance, also give the instructions.
This appliance is only intended for use with water. The flow of other liquids is not permitted and can lead to damage to the appliance.
Before the Initial Operation
Please check to make sure that all connections and cables are in a serviceable condition.
Connect your UV Ionizer to the cleaning circuit of your pool.
Make sure that the water inlet is at the top right. This connection is connected to the pressure side of the filter. The outlet at the bottom left of the Ionizer is connected to the pipe that leads back to the pool. The connections are made from PVC and must be bonded with PVC adhesive. For pipes of 50 mm (2.0 in.) or 40 mm (1.6 in.) use the enclosed reduction fittings.
(Note: We recommend the installation of shut-off valves in front of and behind the UV Ionizer. Shut-off valve for better maintenance, e.g. replacing the UV lamp)
You can use the appliance in automatic mode or by manual settings.
Obey the following instructions for the necessary settings.

Product Overview



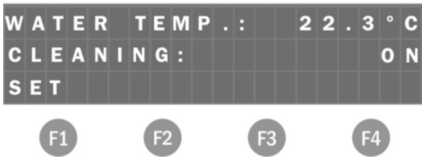
The CE symbol verifies conformity to the present EU guidelines. The declaration of conformity is with the manufacturer.

Initial Operation

Insert the fluorescent tubes in the base of the holder, screw the connection hand tight. When the bonded connections are set, connect the power cable of your pump into the designated 230 V socket. Then connect the UV Ionizer with the power cable to the mains supply. The appliance switches itself on automatically and the display illuminates. The display has 4 rows. Below the display are 4 buttons for the operation of menu navigation. The adjustment of the appliance is carried out through these 4 switches.
After the initial operation, the main menu appears in the display. The main menu is at the top level, from which one goes to the respective sub-me¬nu. The most important basic parameters are displayed. After a period of one minute with no input, the display changes automatically to this menu. After a period of five minutes with no input, the display illumination switches off automatically, to save energy and increase the length of life of the display. At the initial operation, set the clock and date in accordance with the instruction menus at the lowest level setting.
Safety instruction:

- Do not open the socket, the power supply unit or the electronic control box. These have a mains power supply!
- Switch off the appliance and disconnect it from the mains power before you open the UV chamber, ionic chamber or before removal of the sensors. Warning, the system is under pressure
- Do not look directly into the UV chamber during operation. This will prevent damage to your eyes. (UV-C-radiation)

Display Codex



Row 1: Weekday: Mo = Monday, Tu = Tuesday, We = Wednesday, Th = Thursday, Fr = Friday, Sa = Saturday and Su = Sunday.
Time: 00:00 to 23:59 (Hour : Minute)
Operation mode: H – Manual operation, A – Automatic Remaining time to next maintenance, in days

Row 2: Actual recorded water temperature in °C

Row 3: Operating state of the cleaning:
ON = Cleaning in progress, OFF = Cleaning not in operation

Row 4: Menu navigation: Captions represent the function of the buttons
Setting: Press button F1 = Change to the sub-menu
Setting < and >
Press button F2 and F3 = Change within the top menu level in the corresponding sequence
Press button F4 = Change to the information sub-menu

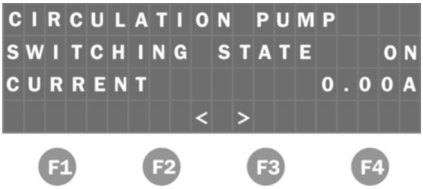
Info: Pressing button F2, changes to the different menus for the individual appliance components at this menu level. First, the Circulation Pump menu appears. With each further actuation of button F2, you change to the next menu respectively: UV Lamp > Ionization > Ionic current > Cu Concentration > pH Value > Mode of operation.

With button F3 you change to the various individual menus within the top menu level, however, in reverse sequence.
With F1 you go to the basic settings. Here the menu Cleaning Cycle 1 is displayed first. With the buttons 2 and F3 you can change forwards or backwards in the menus.

With the activation of button F4 you change the information in the menu level. Also at this level, the values set for the individual components of the appliance are stored. With button F2 you can go forwards in the menu and with F3 set it back. The menus display the adjusted parameters and values of the individual components of the appliance. Should an error, defect or incorrect parameter be present, the error message is displayed by a red light-emitting diode. If everything is alright, the status OK is indicated in the display for the respective components. The diode is then extinguished.

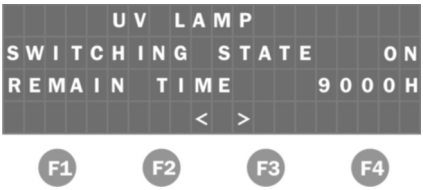
The Menus of the Top Level

Circulation Pump



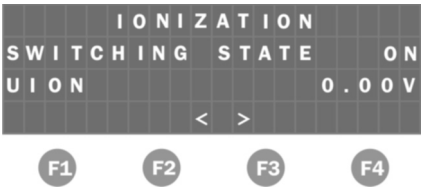
Row 1: Displays in which menu you are in.
Row 2: Switching state: ON = Circulation pump is in operation
Switching state: OFF = Circulation pump is not in operation
Row 3: Displays the actual applied current of the circulation pump in ampere.
Row 4: < = With F2 you can change to the next menu
> = With F3 you can return in the menu sequence

UV Lamp Menu



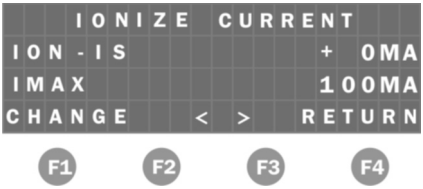
Row 1: Displays which menu you are in.
Row 2: Switching state: ON = UV lamp is in operation
Switching state: OFF = UV lamp is not in operation
Row 3: Displays the remaining time of operation of the UV lamp to the next replacement of the UV tube
Row 4: < = With F2 you can change to the next menu
> = With F3 you can return in the menu sequence

Ionization Menu



Row 1: Displays which menu you are in.
Row 2: Switching state: ON = Ionization in progress
Switching state: OFF = Ionization is not in operation
Row 3: Displays the actual voltage for the ionization(between 0 - 12 V)
Row 4: < = With F2 you can change to the next menu
> = With F3 you can return in the menu sequence

Ionizing Current Menu



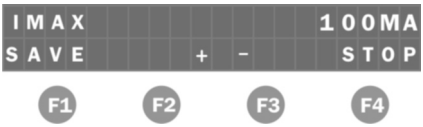
Row 1: Displays which menu you are in.
Row 2: Ion-Is = Displays the actual ionization current, in mA, +/- displays the change in polarization between both electro-des, for the uniform consumption of the electrodes.
Row 3: Displays the actual maximum current set for ionization, in mA. The maximum value represents the upper limit for the ionization performance, at a temperature of 36 °C, when ionized in automatic operation. The actual current for ionization, in row 2 (Ion-Is), is determined depending on the temperature and the set maximum current.
Row 4: CHANGE (F1) = Changes to the set mode to change the maximum ionization current
< = With F2 you can change to the next menu
> = With F3 you can return in the menu sequence

Note: Because of digital measurement tolerances, the Ion-Is can be greater than Ion-Max

Manual Operation.

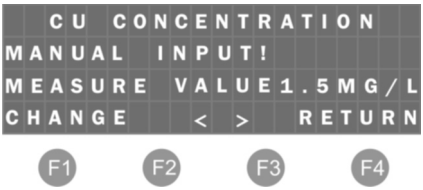
The value for the actual set standard value for the ionization performance. The value represents the greatest possible ionization current, which is not exceeded. The actual ionization current in row 2 can deviate from this value. The reason is the conductibility of the water and has nothing to do with dependency on temperature

Set Ionizing Current Mode



+ (F2) Increases the ionizing current by the value 1
- (F3) Decreases by the value 1
Setting range 0 to 200 mA
If the button is pushed for a longer time, the change to the next value is quicker
SAVE (F1) Saves the selected value and returns to the menu
STOP (F4) - The old value is retained and returns to the menu.

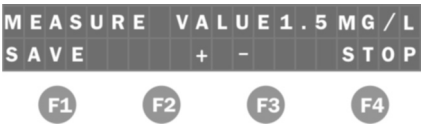
Copper Content Menu



Row 1: Displays which menu you are in.
Row 2: Request for the input of the measured copper content of the water at the time of maintenance
Row 3: Displays the last entered value of the copper content
Row 4: CHANGE (F1) - Changes to the setting mode for the input of the measured copper content
< = With F2 you can change to the next menu

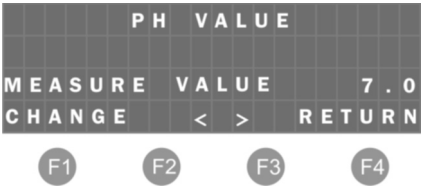
> = With F3 you can return in the menu sequence
If you should have inadvertently put too much copper in the water, you can only reduce the quantity of copper quickly by the flow of fresh water.
Through the further ionization, only a slow reduction in the content of copper will occur, that you can determine at the next maintenance.

Copper Content Input Mode



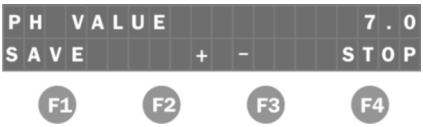
Please determine the copper content of the water to the maintenance date, e.g. with a Cu measuring instrument, available from UVion.
Observe the point pH value
+ (F2) Increases the value by 0.1
- (F3) Decreases the value by 0.1
Setting range 0 to 9.99 mg/l
If the respective button is pushed for a longer time, the change to the next value is quicker. If the measured value is not in SET between 1.0 and 2.0 mg/l, the diode illuminates and signals an error.
SAVE (F1) - Saves the selected value and returns to the menu
STOP (F4) - The old value is retained and returns to the menu. The red light-emitting diode signals the too high or too low copper value to remind you so long until you have set the value within the tolerance range and entered it into the menu. Also, observe the point “Error“.

pH Value Menu



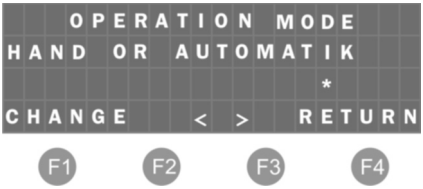
Row 1: Displays which menu you are in.
Row 2: Request for the input of the measured pH value of the water at the time of maintenance
Row 3: Displays the last pH value entered
Row 4: CHANGE (F1) – Changes to the set mode for the input of the measured copper content
< = With F2 you can change to the next menu
> = With F3 you can return in the menu sequence

pH Value Input Mode



+ (F2) Increases the pH value by 0.1
- (F3) Decreases the pH value by 0.1 Setting range 0 to 14
If the measured value is not between 6.7 and 7.1 the diode illuminates and displays an error. The pH value is not in the SET POINT. If the respective button is pushed for a longer time, the display changes to the next value quicker
SAVE (F1) Saves the selected value and returns to the menu
STOP (F4) - The old value is retained and returns to the menu. "Please change the pH value of the water by addition of pH Reduce/ pH Minus."

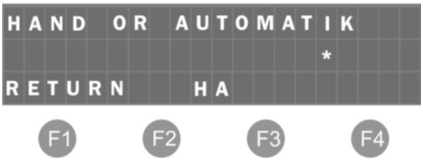
Mode of Operation Menu



Row 1: Displays which menu you are in.
Row 2: Displays the selection, manual setting or automatic operation
Row 3: * Designates the selected mode
Row 4: CHANGE (F1) – Changes to the set mode for the input of the measured copper content

< = With F2 you can change to the next menu
> = With F3 you can return in the menu sequence

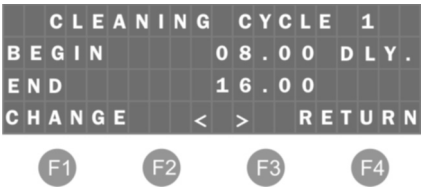
Set Operation Mode



H (F2) - Asterisk is under HAND - adjusted for manual operation
A (F3) - Asterisk is under automatic - adjusted for automatic operation
RETURN (F1) Returns to the menu

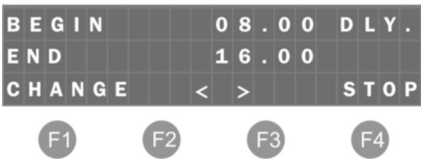
Setting the Lower Level Menus

Cleaning Cycle Menu



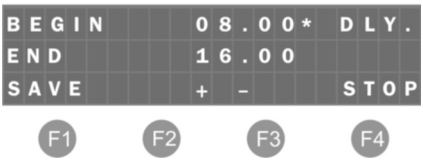
Row 1: Displays which menu you are in.
Row 2: Displays the selected time for the start of the cleaning cycle and the selected weekday
dly = daily, WE = Weekend (Saturday and Sunday)
WD = Weekday (Monday to Friday)
Row 3: Displays the required time for the end of the cleaning cycle
Row 4: CHANGE (F1) - Changes to the set mode for the selection of the begin, end and weekday for the cleaning cycle
< = With F2 you can change to the next menu
> = With F3 you can return in the menu sequence
RETURN (F4) – Returns to the main menu

Set Cleaning Cycle Mode



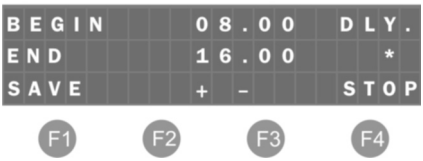
An asterisk (*) appears that designates the actual selection.
With < F2 and > F3 you can change between begin, end and weekday and mark the required parameter. If the asterisk (*) is behind the time to begin, the time to begin the cleaning cycle can be changed with F2 (forwards) and F3 (backwards). Proceed in the same manner when changing the time for END and the weekday.
CHANGE (F1) – Changes to the selected change mode
STOP (F4) – Returns to the menu

Begin and End Change Mode



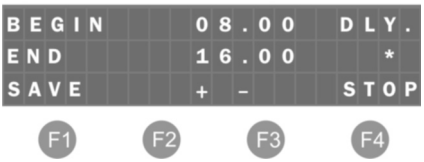
+ (F2) Increases the value by 00:15 minutes
- (F3) Decreases the value by 00:15 minutes
Setting range 00:00 to 23:45
If the button is pushed for a longer time, the change to the next value is quicker SAVE (F1) - Saves the selected value and returns to the set menu
STOP (F4) - The old value is retained and returns to the set menu

Change the Day



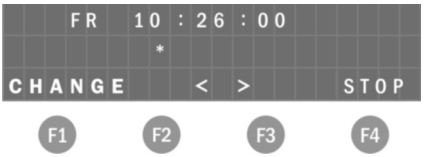
With + F2 and - F3 you can change between the setting options.
dly = daily, WE = Weekend (Saturday and Sunday)
WD = Weekday (Monday to Friday)
SAVE (F1) - Saves your selection and returns to the set mode
STOP (F4) - Returns to the set mode. The selection is retained.

Set Clock Menu



Row 1: Displays which menu you are in
Row 2: Displays the actual weekday, displays the actual time (Hours:Minutes:Seconds)
Row 3: The asterisk symbolizes the selection mark (the selection can only be made in the set mode)
Row 4: Change (F1) in the set mode, changes to the selection of the weekday and time
< (F2) Changes to the next menu
> (F3) Changes to the next menu
(reverse sequence to F2)
Return (F4) returns to the main menu

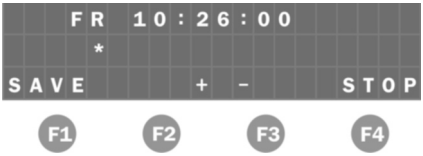
Set Clock Mode



An asterisk appears in the 3rd row that symbolizes the selection choice
With < (F2) and > (F3) you can change between the weekday, hours and minutes and mark the corresponding parameter.
If the asterisk is under the abbreviation for the weekday, the selection of the weekday is marked. If the asterisk is under the hour display, the selection to change of the hour is marked, if the asterisk is under the minute

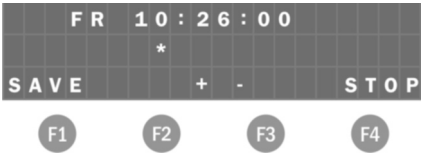
display, the selection to change the minute is marked.
Change (F1) changes to the selected change mode
Stop (F4) returns to the menu

Change Weekday Mode



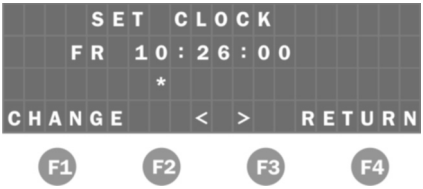
+ (F2) sets the weekday, ascending to Su
- (F3) sets the weekday, descending to Mo
Save (F1) saves the selected value and returns to the set mode
Stop (F4) returns to set mode, the old value is retained

Change Hours Mode



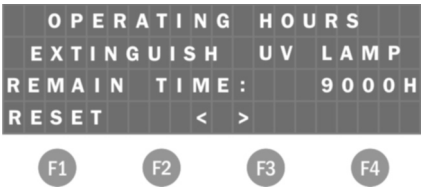
+ (F2) increases by 01:00 - (F3) decreases by 01:00
Adjustment range 00:00 - 23:00
Keep button pressed for fast progression
Save (F1) saves the selected value and returns to the set mode
Stop (F4) returns to the set mode, the old value is retained

Change Minutes Mode



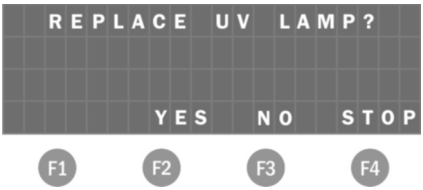
+ (F2) increases by 00:01 - (F3) decreases by 00:01
Adjustment range 00:00 – 00:59
Keep button pressed for fast progression
Save (F1) saves the selected value and returns to the set mode
Stop (F4) returns to the set mode, the old value is retained

Operating Hours Menu



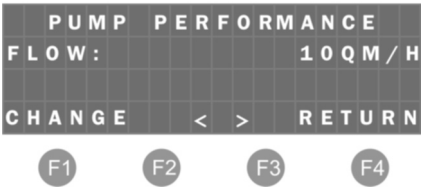
Row 1: Displays which menu you are in
Row 2: Asks whether to set back the operating hours value
Row 3: Displays the remaining time for the lamp to the next latest planned replacement
Row 4: Reset (F1) changes to replace lamp in replace lamp query mode
< (F2) Changes to the next menu
> (F3) Changes to the next menu
(reverse sequence to F2)

Replace Lamp Query Mode



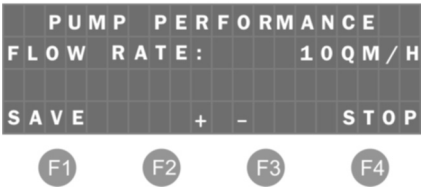
Row 1: Asks whether to replace the UV lamp?
Row 4: Yes (F2), sets the value for the remaining time to 9000h again and returns to the menu
No (F3) changes back to the menu, the old value is retained
Stop (F4) changes back to the menu, the old value is retained

Pump Performance Menu



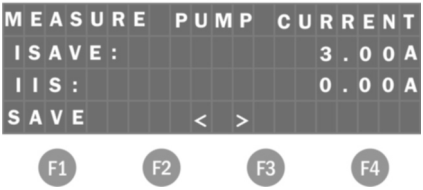
Row 1: Displays which menu you are in
Row 2: Displays the set flow capacity of the filter pump
Row 4: Change (F1) in set mode, changes to the selection of the flow capacity of the filter pump
< (F2) Changes to the next menu
> (F3) Changes to the next menu
(reverse sequence to F2)
Return (F4) returns to the main menu

Set Pump Performance Mode



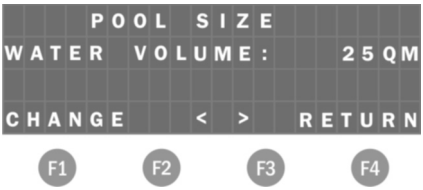
+ (F2) increases by 1 - (F3) decreases by 1
Adjustment range 0 – 100 qm/h
Keep button pressed for fast progression
Save (F1) saves the selected value and returns to the menu
Stop (F4) returns to the menu, the old value is retained

Measure Pump Current Menu



Row 1: Displays which menu you are in
Row 2: Displays the present saved pump current in A
Row 3: Displays the present pump current in A (only if pump is switched on)
Row 4: Save (F1) new value is adopted and is displayed under Isave:
< (F2) Changes to the next menu
> (F3) Changes to the next menu
(reverse sequence to F2)

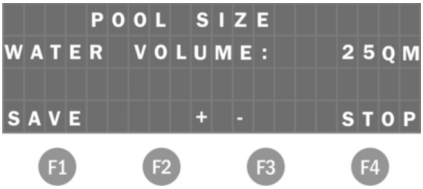
Pool Size Menu



Row 1: Displays which menu you are in
Row 2: Displays the present set contents of the pool in qm

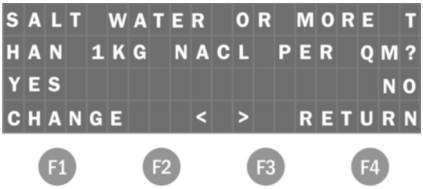
Row 4: Change (F1) in set mode, changes to the selection for the contents of the pool
< (F2) Changes to the next menu
> (F3) Changes to the next menu
(reverse sequence to F2)
Return (F4) returns to the main menu

Set Pool Size Mode



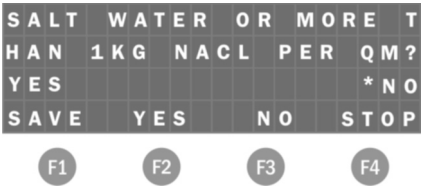
+ (F2) increases by 1 - (F3) decreases by 1
Adjustment range 0 – 100 qm
Keep button pressed for fast progression
Save (F1) saves the selected value and returns to the menu
Stop (F4) returns to the menu, the old value is retained

Salt Content Menu



Row 1 and 2: Asks about the salt content in the pool water
Row 3: * symbolizes the selection, if the asterisk is behind Yes, the setting with salt content is selected, if the asterisk is in front of No, the setting without salt is selected
Row 4: Change (F1) in set mode, changes to the selection
< (F2) Changes to the next menu
> (F3) Changes to the next menu
(reverse sequence to F2)
Return (F4) returns to the main menu

Set Salt Content Mode



Yes (F2) selection activated to Yes, asterisk is displayed behind it
No (F3) selection activated to No, asterisk is displayed in front of it
Save (F1) saves the activated selection and returns to the menu
Stop (F4) returns to the menu, the old selection is retained

Automatic Operation

To guarantee a uniform cleaning of the water, it is recommended to use the Ionizer in automatic operation. The following describes how you can set the settings of the cleaning cycle, in automatic operation, in accordance with your requirements. The following steps are necessary to set the appliance in operation:

1. Preparation:
Add 4.96 mg copper sulphate for every cubic meter of water. (Example: pool volume 20 m3 = add 79.2 mg copper sulphate)

2. Mains Connection:
Connect to the designated plug or connection box on the filter pump. Now connect the power cable of the appliance to a maximum of 230 V. The appliance switches itself on automatically and the display illuminates.

3. Settings:
The display has 4 rows. Below the display are 4 control elements (F1 to F4). These are used for the menu navigation and adjustment of the appliance.

3.1. Set the Date and Time
By pushing button F1 you get to the Set menu and can select the weekday.

With button F2 and F3 you change to the Set Clock menu. To save, again activate button F1. You then go automa¬tically to the selection menu again and can adjust the hours minutes in the same manner. Always use the button F1 to save. With button F4 you again get to the basis menu.

3.2. Set the Pump Current

With button F2 you change to the adjust Pump Current menu. Push the button a little longer. Then after a short time, a more stable value will be indicated in row 3 of the display. With button F1 you again save the value. The new value is now displayed in row 2. The value is necessary in order to check that the pump functions.

If, in operation later, the actual value deviates from the calibrated value, the control registers a malfunction (e.g. sand filter clogged or leak in a pipe) and automatically switches off the complete appliance.
Refer also to Errors. Please observe that this value is relative and is used only for internal purposes and must not conform to the performance of the pump.

3.3. Set the Flow Capacity of the Filter Pump

With the activation of button F3 you get to the Measure Pump Current menu. With button F1 you get to the settings. With button F2 and F3, you can now enter the performance of your pump. With button F1, you again save the value. (Also refer to Point 3.6.)

3.4. Set the Water Quantity and Quality

Push button F2 twice. You are now in the Pool Size menu. Push F1 in order to make the settings. With F2 and F3 you can again enter the value and save it with F1. With a further push of F2 you get to the request whether salt water is in the pool. First push F1 and then, with F2=Yes or F3=No, select the correct answer. Save your input again with F1. By pushing button F4, you go back to the main menu.

> Note:The setting of the salt water, Yes or No, is only important for the in-ternal calculation of the ionization. Therewith, there are no further settings necessary.

3.5. Cleaning Cycle

You can program up to 3 various cleaning cycles. If you now push button F1 you get to the Cleaning Cycle 1, 2 or 3 menus. You can enter the required cleaning time in this menu, in which the system then carries out the cleaning automatically. With button F1, you get to the selection which parameters should be adjusted: Start time, end time and for which days of the week the selection should be carried out. Herewith, it will be distinguished between daily, weekday and weekend. The active selection is indicated by an asterisk. The selection is carried out with button 2. After that, you can change your selection with button F2 and F3. By pushing button F1 you save your values.

There are 3 setting options for the selection of the cleaning cycle days: WE= Weekend, WD= Workdays or dly = daily. Depending on your requirement, the cleaning is then done only at the weekend, on the respective weekday or every day. With activation of button F4 you go back to the main menu.

Note: With the 3 cleaning cycles, you can determine separate cleaning times for the weekdays, as well as for the weekend, or configure daily up to 3 cycles. The total daily cleaning period must conform to the performance of the pump and the contents of the pool. As a rule: 3 complete circulations per day!

Example:
Volume of pool 25m3 and performance of the pump is 5m3/h = 5h * 3 circulations per day = 15 hours. The total cleaning period can be arbitrarily distributed in the cleaning cycles
Whether the cleaning time selected by you is sufficient, is determined by the software from the times set by you and, if necessary, will warn you.

3.6. Input of the Actual Measurement Values

With button F2 you again get to the Cu Concentration menu. Push F1 and adjust the value, measured with the measuring instrument, with buttons F2 and F3. With button F1 you again save the value. The maintenance ¬interval is now calculated and displayed in the main menu. If the value is below the limit of 1 mg/l, we recommend that you increase the ionization current. If the value is above the limit of 2 mg/l, we recommend that you decrease the ionization current. In both cases, an error message will be signalled.

The error will only be extinguished after input of the correct measurement values, if the new value is in the set point range that you must check and enter at the next maintenance. This serves as a reminder that the correct value has not yet been attained.
Change to the Ionization Current menu by pushing button F3. With F1 you get to the set mode. With F2 and F3 you set the required values. The correct value is limited to the range of 0 to 200 mA. With F1, you again save the actual value. Now, with button F2 change to the menu PH Value. With F1 you again get to enter. Now enter the measured value with buttons F2 and F3 and save this with F1.
Should the value be more than 7.1, an error message is displayed. Now add pH minus to the water. The error message is corrected at the next maintenance. If the measured value is in the set point range at the next maintenance, the error message is eliminated by the input of the new measured value.

3.7. Set Operating Mode

Use F2 to get to the Operation Mode menu and push F1. With F3 you select automatic operation. From now on, the appliance operates automatically in the cleaning cycles setting.

Maintenance

The first maintenance is stipulated after 7 days. You must now measure the copper content and the pH value and save them in the menus. Also refer to Point 3.
If no maintenance is carried out, the appliance automatically switches off after another 7 days (tolerance). After input of the new measured values, the time to the next maintenance is set back in the main menu. This routine is for your safety and is recorded.
General Notes:

Make sure that the pump is not in operation before you want to open the UV chamber or the ionic chamber! Close all shut-off valves. For your safety, disconnect the appliance from the mains supply.
In automatic operation, the UV lamp switches on automatically approx. one minute after switching on the pump.

The lamp only illuminates when the pump operates. As soon as the pump stops, the UV lamp also switches off and the appliance is, therefore, not in operation.
The ionization changes the polarization every 5 minutes in order to guarantee uniform use of the anodes.
The change of the ionization performance is only displayed and effective with the next change of polarisation.

Manual Operation

The manual operation is recommended to test the cleaning cycles or, if an additional cleaning is required outside of the adjusted cleaning cycles in automatic operation, or if you want to manually control the pump for the back flushing of your filter.

1. Set Operation Mode

In the Operation Mode menu use F3 to change from the main menu. Push F1 to change to the mode. The selection for the manual operation is done with F2. With F1 you save your setting and return again to the Operation Mode menu.

2. Set Circulation Pump

Push F2 twice to change to the Circulation Pump menu. With F1 you get to the change mode. From here you can use F2 to switch on the pump. With F3 you can switch off the pump.
The prescribed cleaning times, settings for the water quantity and pump performance are not provided for in manual operation. That means the pump only operates if it is manually switched on. With F1 you get back to the Circulation Pump menu.

3. Set UV Lamp

With F2 you get to the UV Lamp menu. With F1 you get to the change mode. With F2 you switch on the UV lamp. With F3 the UV lamp is switched off.
Please observe that the UV lamp can only be switched on if the circulation pump is in operation! Only then is the necessary cooling for the UV lamp guaranteed. With F1 you save your settings and get back to the UV Lamp menu

4. Ionization

With F2 you get to the Ionization menu. As already described, with F1 you get to the change mode for the switching state. With F2 you switch on the ionization and with F3 you deactivate the ionization. With F1 you save your input and get back to the Ionization menu

5. Ionization Current

Activate F2 to get to the Ionization menu. In the third row of the display, the actual maximum adjusted ionization current is displayed. This value represents the highest possible ionizing performance. With F1 you get to the change mode again. With F2 you can increase the ionizing current to the highest value of 200 mA. With F3 you can decrease the ionizing current down to 0 mA. With F1 you save your setting. With F4 you stop the procedure. You can continually change your settings during the manual operation.

We recommend that you use a pH dosage system, that you can purchase from Uvion as an option, in order to maintain the pH value in the optimum range. The Uvion appliance then operates at its best.

Cleaning and Care

Replace UV lamp
Clean the UV lamp with vinegar and a soft, lint-free cloth.
(only hold the lamp at the base)

Clean the anodes with vinegar.
Replace the anodes
Make sure that the sealing rings are used correctly

Regular back flushing of the filter
First response if a biofilm forms, clean the pool with a sponge, after that hardly detectable.

If the copper content is too high: •Clean the edge of the pool
•Shower before and after using the pool.

Disposal

Protect our environment!

Do not dispose of the appliance as normal household waste. Enquire at your town council or local authority about the options for environmental and appropriate disposal of the appliance.

Disassemble the appliance professionally for environmentally friendly disposal
Before you begin with the disassembly, disconnect the appliance from the mains supply.
Dispose of the components with similar ones at the appropriate collection points.
Warning! Never use an appliance that has been disassembled!

Fault Analysis

Current Consumption too Low

The value deviates from the calibrated current. Check to make sure that the pump is plugged in or if it has a defect.

Current Consumption too High

The value deviates from the calibrated value. The pump is blocked. Check the flow at the pump and filter and whether all valves are open.

UV Lamp Defect

The lamp current given by the manufacturer is no longer achieved. Check to see if the lamp sits firmly on the base. Check the connection for the mains supply. If the lamp appears black at the top, it is defect and must be replaced. Otherwise there is a defect at the starter. Then replace the starter.

Indication in the Display:

UV lamp is nearly exhausted - Note, it is necessary to replace the UV lamp soon.
UV lamp exhausted - The maximum number of operating hours has been achieved. The UV lamp is not effective. Please replace the UV lamp.

Ionization Short Circuit
Check the connections at the ionic chamber. The error message extinguishes if all cables have contact. Check to see if water has collected in the connection part of the ionic chamber and reseal it. If you have salt water, check to see if you have activated the salt water setting.

Ionization Broken Cable
There is no voltage at the electrodes. Check the supply line. If all cables are correctly connected with the electrodes, the display must extinguish.

Ionization Cu Rods Worn
Sufficient voltage for the ionization process can no longer be produced. The Cu rods must be replaced.

Temperature Sensor Short Circuit
Check the cable of the temperature sensor for possible contact with the water and rectify the fault.

Temperature Sensor Interrupted
No input value can be detected. Check that all of the cables are correctly connected. The cables must not be damaged.

pH Value too High
The pH value is more than the upper limit value of 7.1. Add pH minus to the water. Thereby, observe the notes on the packaging.

pH Value too Low
The pH value is less than the limit value of 6.7. Add pH plus to the water.

Cu Value too High
The Cu value is more than the limit value of 2.0 mg/l. Reduce the Imax value in the Ionization Current menu. Proceed as described in Point 3

Cu Value too Low
The effectivity of the disinfection is not satisfactory and the water can become green through the formation of algae. The Cu value is less than the limit value of 1.0 mg/l. Increase the Imax value in the Ionization Current menu. Proceed as described in Point 3. At the next maintenance, check the

Cu value and increase or reduce the ionizing performance corresponding to the display. After a certain time the value will stabilize and the correct ionizing performance is attained.

Cleaning Time too Short

The selected times in the Cleaning Cycle 1, 2 and 3 menus are not sufficient with regard to the water quantity and pump performance. An adequate cleaning is not guaranteed. Please increase the total cleaning time to the minimum daily hours.

Garantie and Service

We accept the guarantee for the correct quality and function of the UV Ionizer within the scope of our general terms and conditions. The guarantee period is 24 months and begins on the day of purchase from an authorized specialist. Please keep the invoice as proof of purchase.

The legal warranty is not restricted by this guarantee. During the period of warranty, you can send defective appliances, postage paid accordingly, to the service center given below. You will then receive a new, or the repaired appliance at no cost. Appliances sent to us not prepaid will not be accepted by us.

Use the original packaging to prevent damage when transporting and enclose a copy of the invoice. An accurate description of the complaint reduces the repair time.
After expiry of the period of guarantee, you also have the possibility to send defective appliances, postage paid accordingly, to the service center given below.

The necessary repairs are then liable for payment. In payment of a low sum, we can give you an estimate of the cost. All seals, starter and fluorescent tubes, copper rods, electrodes, as expendable parts, are not subject to the conditions of the guarantee.
Improper use, opening of the electronic control and adjustment box from non- authorised specialists, replacement of components that do not come under consumable materials and are not delivered as original from UVion, will lead to termination of the guarantee

CE Conformity Statement

for the water treatment appliance

Product: UV Ionizer (UVion Systems)

Herewith, we declare that the designated appliance, based on its conception as well as the design of the version marketed, conforms to the guidelines of the European Union, especially the EMV guidelines and low voltage guideline.

In detail, the above mentioned appliance fulfils the standards given as follows:

EN 60730-1:2000 +A1:2004 +A12:2003 +A13:2004 +A14:2005
EN 60730-2-1:1997 +A11:2005

The above mentioned appliance is therefore awarded the CE symbol.

Chemnitz, 31st March 2008
UVion Concept GmbH & Co KG

Uwe Thuß
Managing Director

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CE

Technical Data

UV Ionizer
Article No. 5001
Power consumption: Standby 2 W, cycling 15 W, max. Pump current 1.5 kW plus pump + lamp current
Ionization performance: 200 mA/12 V, protection 10 A
Connector:Input 230 V 50 Hz
Protection class IP 65
Pipe connection: PVG, 63 mm (2.5 in.), 50 mm (2.0 in.), 40 mm (1.6 in.)
Pressure: max. 2 bar (30 psi)

Accessories

pH Measurement device
Copper Measurement device
Test kit
pH Control and metering
pH Electrode (calibration fluid)
Ionic rods in plug-in sleeve
Copper sulphate for the initialization of the copper value

Service Center: UVion concept GmbH & Co KG
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UVion